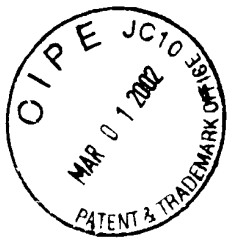


\* 1990-1991: 1st year  
 - 1992-1993: 2nd year  
 A 1994-1995: 3rd year



February 28, 2002

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**WRITER'S DIRECT NUMBER:**  
(202) 371-2544

**INTERNET ADDRESS:**  
mcimbala@skgf.com

Commissioner for Patents  
Washington, D.C. 20231

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MAP 1.1.

2300

Re: U.S. Utility Patent Appl. No. 10/052,545; Filed: January 23, 2002

U.S. Utility Patent Appl. No. 10/052,545, Filed: January 29, 2002  
For: **Human Melanocyte Stimulating Hormone Receptor Polypeptide and DNA**

Inventors: Wikberg *et al.*

Our Ref: 1808.0010002/MAC/MBT

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. Information Disclosure Statement;
2. Form PTO-1449 (16 pages), including copies of fifty-seven (57) documents cited; and
3. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Michael A. Smith

Michele A. Cimbala  
Attorney for Applicants  
Registration No. 33.851

MAC/MBT/lam  
Enclosures

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In re application of:

Wikberg *et al.*

Appl. No. 10/052,545

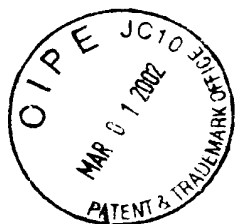
Filing Date: January 23, 2002

For: **Human Melanocyte Stimulating  
Hormone Receptor Polypeptide  
And DNA**

Art Unit: *To be assigned*

Examiner: *To be assigned*

Atty. Docket: 1808.0010002/MAC/MBT



**Information Disclosure Statement**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each document is provided.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

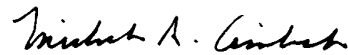
This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this pleading is enclosed.

Respectfully submitted,

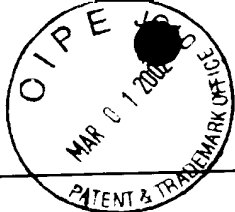
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Michele A. Cimbala  
Attorney for Applicants  
Registration No. 33,851

Date: Feb. 28, 2002

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Suite 600  
Washington, D.C. 20005-3934  
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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1808.0010002/MAC/MBTAPPLICATION NO.  
10/052,545APPLICANT  
Wikberg et al.FILING DATE  
January 23, 2002GROUP  
To be assigned

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE       | NAME          | CLASS | SUB-<br>CLASS | FILING DATE |
|---------------------|-----|--------------------|------------|---------------|-------|---------------|-------------|
|                     | AA1 | 5,280,112          | 01/18/1994 | Cone et al.   | 536   | 23.5          | 04/10/1992  |
|                     | AB1 | 5,532,347          | 07/02/1996 | Cone et al.   | 536   | 23.5          | 04/10/1992  |
|                     | AC1 | 5,554,729          | 09/10/1996 | Cone et al.   | 530   | 350           | 06/15/1993  |
|                     | AD1 | 5,622,860          | 04/22/1997 | Yamada et al. | 435   | 252.3         | 02/17/1994  |
|                     | AE1 | 5,710,265          | 01/20/1998 | Yamada et al. | 536   | 23.5          | 06/27/1996  |
|                     | AF1 | 5,773,229          | 06/30/1998 | Cone et al.   | 435   | 7.21          | 06/07/1995  |
|                     | AG1 | 5,837,521          | 11/17/1998 | Cone et al.   | 435   | 240.1         | 04/08/1993  |
|                     | AH1 | 5,849,871          | 12/15/1998 | Cone et al.   | 530   | 350           | 06/06/1995  |
|                     | AI1 | 6,100,048          | 08/08/2000 | Cone et al.   | 435   | 7.21          | 09/04/1996  |
|                     | AJ  |                    |            |               |       |               |             |
|                     | AK  |                    |            |               |       |               |             |

## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE       | COUNTRY  | CLASS | SUB-<br>CLASS | TRANSLATION |
|---------------------|-----|--------------------|------------|--|-------|---------------|-------------|
|                     | AL1 | WO 93/21316        | 10/28/1993 | WIPO (original<br>w/corrected version<br>attached) |       |               | Yes<br>No   |
|                     | AM1 | WO 94/04674        | 03/03/1994 | WIPO   |       |               | Yes<br>No   |
|                     | AN  |                    |            |  |       |               | Yes<br>No   |
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|                     | AP  |                    |            |  |       |               | Yes<br>No   |

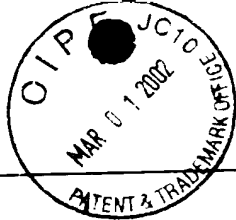
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |   |   |
|----|---|---|
| AR | 1 | Burchill, S.A., et al., "Tyrosinase Synthesis in Different Skin Types and the Effects of $\alpha$ -Melanocyte-Stimulating Hormone and Cyclic AMP," <i>J. Invest. Dermatol.</i> 95:558-561, Williams & Wilkins Co. (1990). |
| AS | 1 | Chhajlani, V., et al., "Molecular cloning and expression of the human melanocyte stimulating hormone receptor cDNA," <i>FEBS Lett.</i> 309:417-420, Elsevier Science B.V. (September 1992).                               |
| AT | 1 | Chhajlani, V., et al., "Molecular Cloning of a Novel Human Melanocortin Receptor," <i>Biochem. Biophys. Res. Comm.</i> 195:866-873, Academic Press, Inc. (September 1993).  |

EXAMINER

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INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1808.0010002/MAC/MBTAPPLICATION NO.  
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|                     | AL |                    |      |         |       |               | Yes<br>No   |
|                     | AM |                    |      |         |       |               | Yes<br>No   |
|                     | AN |                    |      |         |       |               | Yes<br>No   |
|                     | AO |                    |      |         |       |               | Yes<br>No   |
|                     | AP |                    |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

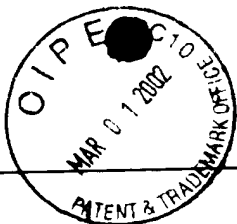
|    |   |   |
|----|---|---|
| AR | 2 | Clark, W.G., et al., "Analysis of the Antipyretic Action of $\alpha$ -Melanocyte-Stimulating Hormone in Rabbits," J. Physiol. 359:459-465, Cambridge University Press (1985). |
| AS | 2 | Database EMBL, Accession No. L06155, Gantz, I., et al. (February 1993).   |
| AT | 2 | Database EMBL, Accession No. X70667, Roselli-Reh fuss, L., et al. (August 1993).  |

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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1808.0010002/MAC/MBT

APPLICATION NO.  
10/052,545

APPLICANT  
Wikberg et al.

FILING DATE  
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GROUP  
To be assigned

**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | DATE | NAME | CLASS | SUB-<br>CLASS | FILING DATE |
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|                     | AL |                    |      |         |       |               | Yes<br>No   |
|                     | AM |                    |      |         |       |               | Yes<br>No   |
|                     | AN |                    |      |         |       |               | Yes<br>No   |
|                     | AO |                    |      |         |       |               | Yes<br>No   |
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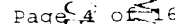
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

|  |    |          |   |
|--|----|----------|---|
|  | AR | <u>3</u> | de Wied, D., "Melanotropins as Neuropeptides," Ann. NY Acad. Sci. 680:20-28, Springer Press (May 1993).   |
|  | AS | <u>3</u> | Gantz, I., et al., "Molecular Cloning of a Novel Melanocortin Receptor," J. Biol. Chem. 268:8246-8250, American Association for Biochemistry and Molecular Biology, Inc. (April 1993).                                      |
|  | AT | <u>3</u> | Gantz, I., et al., "Molecular Cloning, Expression, and Gene Localization of a Fourth Melanocortin Receptor," J. Biol. Chem. 268:15174-15179, American Association for Biochemistry and Molecular Biology, Inc. (July 1993). |

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INFORMATION DISCLOSURE STATEMENT

APPLICATION NO.  
10/052,545

FILING DATE  
January 23, 2002

GROUP  
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## U.S. PATENT DOCUMENTS

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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1808.0010002/MAC/METAPPLICATION NO.  
10/052,545APPLICANT  
Wikberg et al.FILING DATE  
January 23, 2002GROUP  
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## U.S. PATENT DOCUMENTS

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|                     | AL |                    |      |         |       |               | Yes<br>No   |
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|                     | AO |                    |      |         |       |               | Yes<br>No   |
|                     | AP |                    |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|    |          |   |
|----|----------|---|
| AR | <u>5</u> | Hiltz, M.E. and Lipton, J.M., "Antiinflammatory activity of a COOH-terminal fragment of the neuropeptide $\alpha$ -MSH," <i>FASEB J.</i> 3:2282-2284, Federation of American Societies for Experimental Biology (1989). |
| AS | <u>5</u> | Hnatowich, D.J., "Antibody Radiolabeling, Problems and Promises," <i>Nucl. Med. Biol.</i> 17:49-55, Pergamon Press plc. (1990).   |
| AT | <u>5</u> | Ho, V.C., et al., "Therapy for cutaneous melanoma: An update," <i>J. Am. Acad. Dermatol.</i> 22:159-176, Mosby (1990).  |

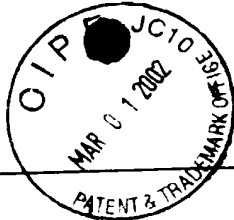
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Page 7 of 6  
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1808.0010002/MAC/MBT

APPLICATION NO  
10/052,545

APPLICANT  
Wikberg et al.

FILING DATE  
January 23, 2002

GROUP  
To be assigned

**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | DATE | NAME | CLASS | SUB-<br>CLASS | FILING DATE |
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**FOREIGN PATENT DOCUMENTS**

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|                     |    |                    |      |         |       |               | Yes<br>No   |
|                     | AL |                    |      |         |       |               | Yes<br>No   |
|                     | AM |                    |      |         |       |               | Yes<br>No   |
|                     | AN |                    |      |         |       |               | Yes<br>No   |
|                     | AO |                    |      |         |       |               | Yes<br>No   |
|                     | AP |                    |      |         |       |               | Yes<br>No   |

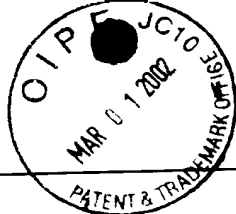
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

|  |    |   |   |
|--|----|---|---|
|  | AR | 7 | Larson, S.M., "Biologic Characterization of Melanoma Tumors by Antigen-Specific Targeting of Radiolabeled Anti-Tumor Antibodies," <i>J. Nucl. Med.</i> 32:287-291, Society of Nuclear Medicine (February 1991). |
|  | AS | 7 | Levine, N., et al., "Induction of Skin Tanning by Subcutaneous Administration of a Potent Synthetic Melanotropin," <i>J. Am. Med. Assoc.</i> 266:2730-2736, American Medical Association (November 1991).       |
|  | AT | 7 | Lewin, R., "When Does Homology Mean Something Else?" <i>Science</i> 237:1570, American Association for the Advancement of Science (1987).   |

EXAMINER

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FORM PTO-1449

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10/052,545APPLICANT  
Wikberg et al.FILING DATE  
January 23, 2002GROUP  
To be assigned

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|                     | AF |                    |      |      |       |               |             |
|                     | AG |                    |      |      |       |               |             |
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|                     | AL |                    |      |         |       |               | Yes<br>No   |
|                     | AM |                    |      |         |       |               | Yes<br>No   |
|                     | AN |                    |      |         |       |               | Yes<br>No   |
|                     | AO |                    |      |         |       |               | Yes<br>No   |
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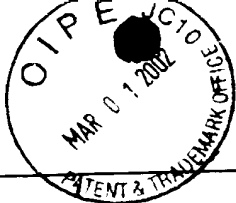
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|  |    |   |   |
|--|----|---|---|
|  | AR | 8 | Liu, M.A., et al., "Hormone Conjugated with Antibody to CD3 Mediates Cytotoxic T Cell Lysis of Human Melanoma Cells," <i>Science</i> 239:395-398, American Association for the Advancement of Science (1988).                           |
|  | AS | 8 | Mertz, L.M. and Catt, K.J., "Adrenocorticotropin receptors: Functional expression from rat adrenal mRNA in <i>Xenopus laevis</i> oocytes," <i>Proc. Natl. Acad. Sci. USA</i> 88:8525-8529, National Academy of Sciences (October 1991). |
|  | AT | 8 | Mountjoy, K.G., et al., "The Cloning of a Family of Genes That Encode the Melanocortin Receptors," <i>Science</i> 257:1248-1251, American Association for the Advancement of Science (August 1992).                                     |

EXAMINER

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FORM PTC-1449

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|                     | AG |                    |      |      |       |               |             |
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|                     | AM |                    |      |         |       |               | Yes<br>No   |
|                     | AN |                    |      |         |       |               | Yes<br>No   |
|                     | AO |                    |      |         |       |               | Yes<br>No   |
|                     | AP |                    |      |         |       |               | Yes<br>No   |

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

|  |    |   |   |
|--|----|---|---|
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ATTY. DOCKET NO. 1808.0010002/MAC/MBT

APPLICATION NO.  
10/052,545

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Wikberg et al.

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|                     | AO |                    |      |         |       |                | Yes<br>No   |
|                     | AP |                    |      |         |       |                | Yes<br>No   |

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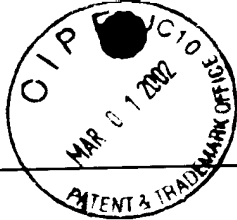
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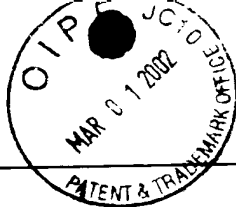
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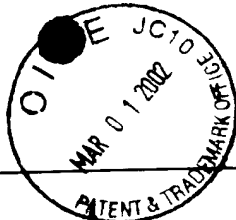
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|                     | AL |                    |      |         |       |               | Yes<br>No   |
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|                     | AN |                    |      |         |       |               | Yes<br>No   |
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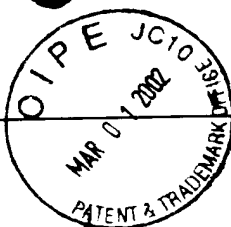
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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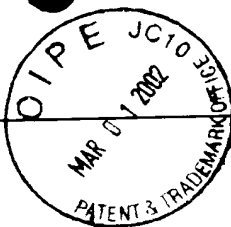
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|  | AS | <u>15</u> | Partial European Search Report for the corresponding EPO application, European Patent Application No. 01 11 0664, mailed November 8, 2001. |
|  | AT | <u>15</u> | Allowed claims from United States Patent Application No. 08/387,805, Wikberg et al., filed February 21, 1995.                              |

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